OECD

Tax Reform: An International Perspective

The President's Advisory Panel on Federal Tax Reform
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By
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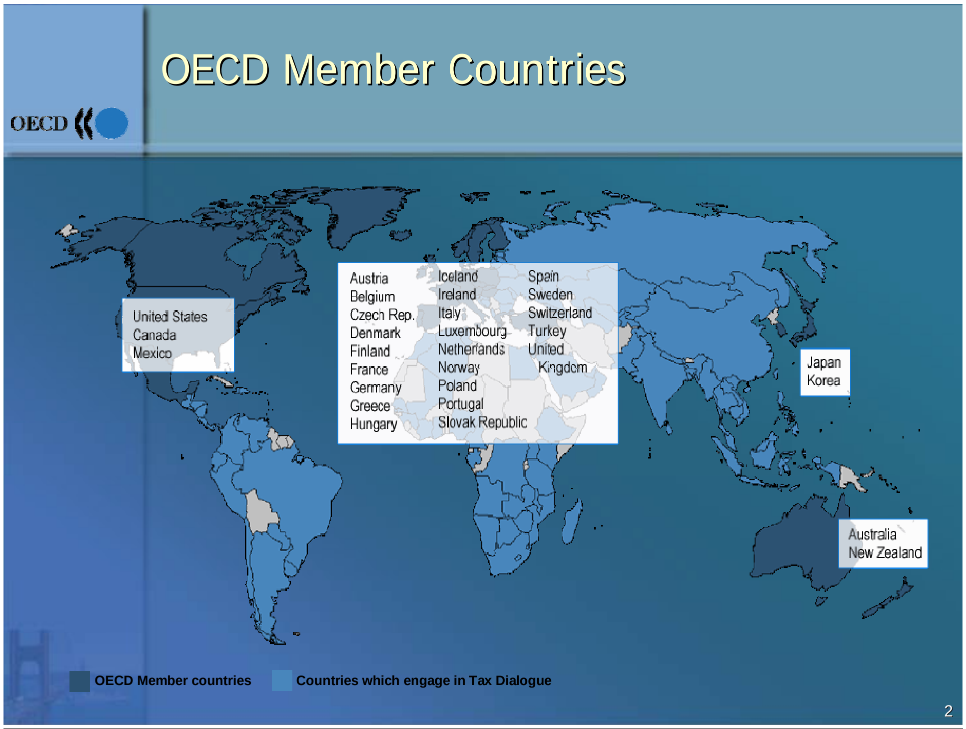
Organisation for Economic Cooperation and Development


OECD Member Countries
OECD
United States
Canada
Mexico
Austria
Belgium
Czech Rep.
Denmark
Finland
France
Germany
Greece
Hungary
Iceland
Ireland
Italy
Luxembourg
Netherlands
Norway
Poland
Portugal
Slovak Republic
Spain
Sweden
Switzerland
Turkey
United Kingdom
Japan
Korea
Australia
New Zealand
OECD Member countries
Countries which engage in Tax Dialogue
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Since mid 1980s a Wave of Tax Reform in All OECD Countries Driven by:

- A fairer tax system
  - similar treatment for similarly placed taxpayers (horizontal equity)
  - achieve desired allocation of tax burden by income level (vertical equity)
  - improved compliance
- An efficient and competitive tax system
  - promoting a competitive and flexible fiscal environment
  - making work, savings and investment pay
- A simpler tax system
  - reduce compliance costs for taxpayers
  - reduce administrative costs for tax authorities
- Protecting the environment through tax and related measures

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Main Characteristics of Tax Reform in OECD Countries

- Lower tax rates; broader tax bases
- Move towards flatter personal income taxes
- Move towards dual income taxes (lower rates on capital than on labor)
- Integrate social benefits into the tax system (earned income tax credits)
- Relief for taxation of dividend income
- Change in mix of income and consumption taxes (VAT)
- Reduction of complexity
- Introduction of market based environment instruments

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Trends in the Taxation of Dividend Income (2000-2004)

Country	Reform Year	Pre-Reform System	Post-Reform System
United States	2003	Classical	Reduced scheduler PIT rate (15% federal)
Germany	2001	Full imputation (with split rate)	Classical (with PIT rate)
	2002	Classical (with split rate)	Partial inclusion
Italy	2004	Full imputation	Partial inclusion
Korea	2001	Classical	Partial inclusion
Portugal	2002	Reduced scheduler PIT rate	Partial inclusion
Slovak Republic	2003	Classical	Personal tax exemption
Turkey	2003	Partial imputation	Partial inclusion

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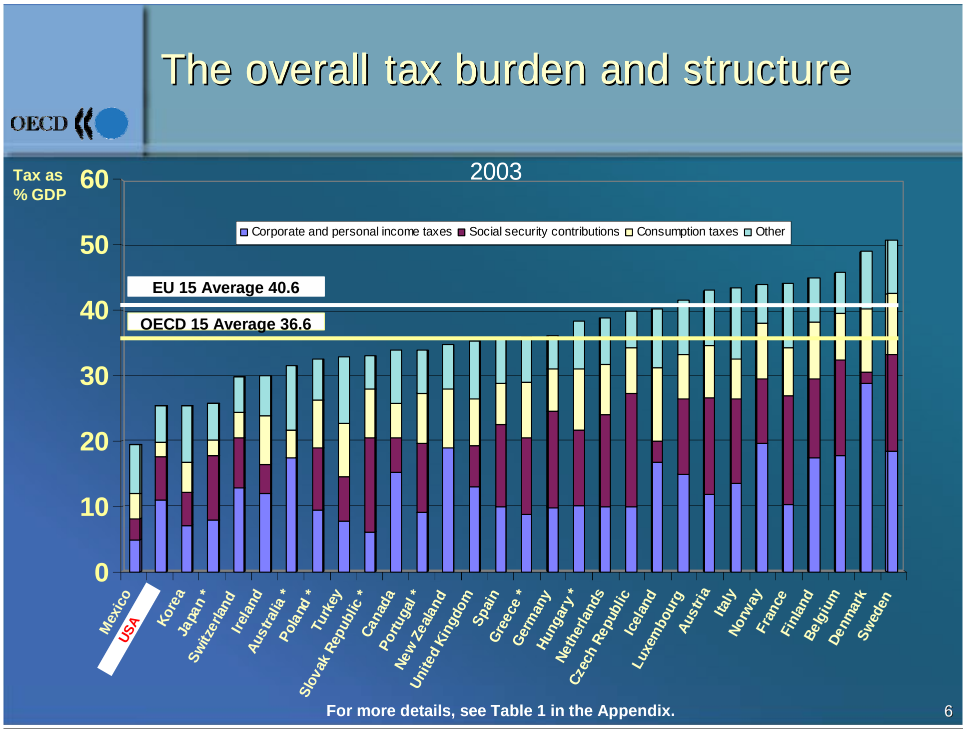
The overall tax burden and structure
OECD
2003
Tax as % GDP
60
50
40
30
20
10
0
Corporate and personal income taxes
Social security contributions
Consumption taxes
Other
EU 15 Average 40.6
OECD 15 Average 36.6
Mexico
USA
Korea
Japan *
Switzerland
Ireland
Australia *
Poland *
Turkey
Slovak Republic *
Canada
Portugal *
New Zealand
United Kingdom
Spain
Greece *
Germany
Hungary *
Netherlands
Czech Republic
Iceland
Luxembourg
Austria
Italy
Norway
France
Finland
Belgium
Denmark
Sweden
For more details, see Table 1 in the Appendix.
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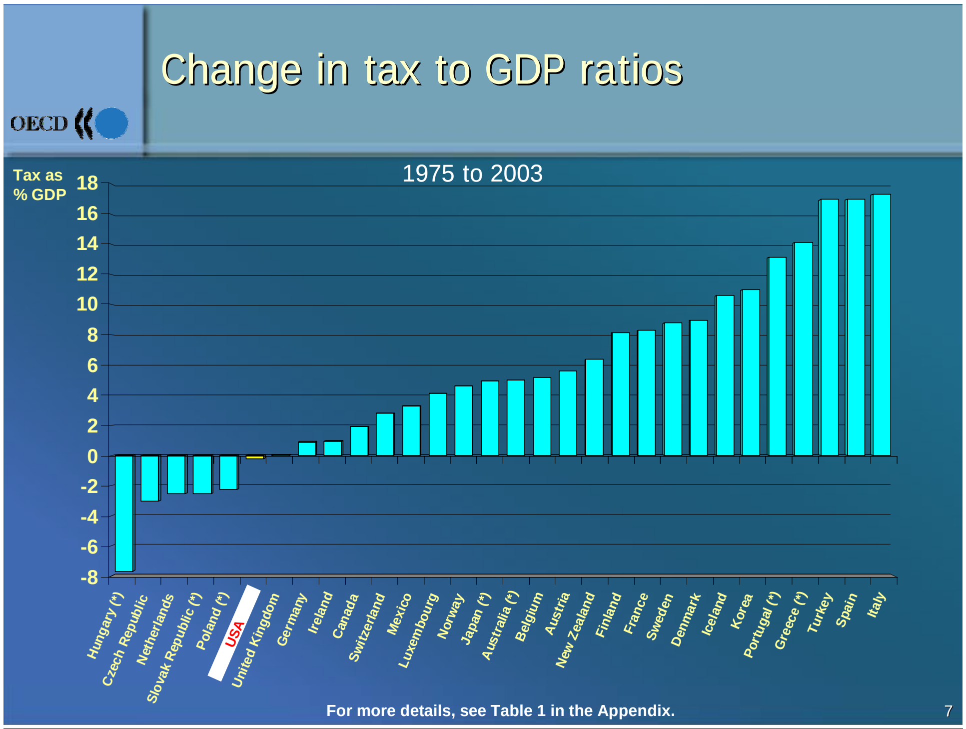
OECD
Change in tax to GDP ratios
1975 to 2003
Tax as % GDP
18
16
14
12
10
8
6
4
2
0
-2
-4
-6
-8
Hungary (*)
Czech Republic
Netherlands
Slovak Republic (*)
Poland (*)
USA
United Kingdom
Germany
Ireland
Canada
Switzerland
Mexico
Luxembourg
Norway
Japan (*)
Australia (*)
Belgium
Austria
New Zealand
Finland
France
Sweden
Denmark
Iceland
Korea
Portugal (*)
Greece (*)
Turkey
Spain
Italy
For more details, see Table 1 in the Appendix.
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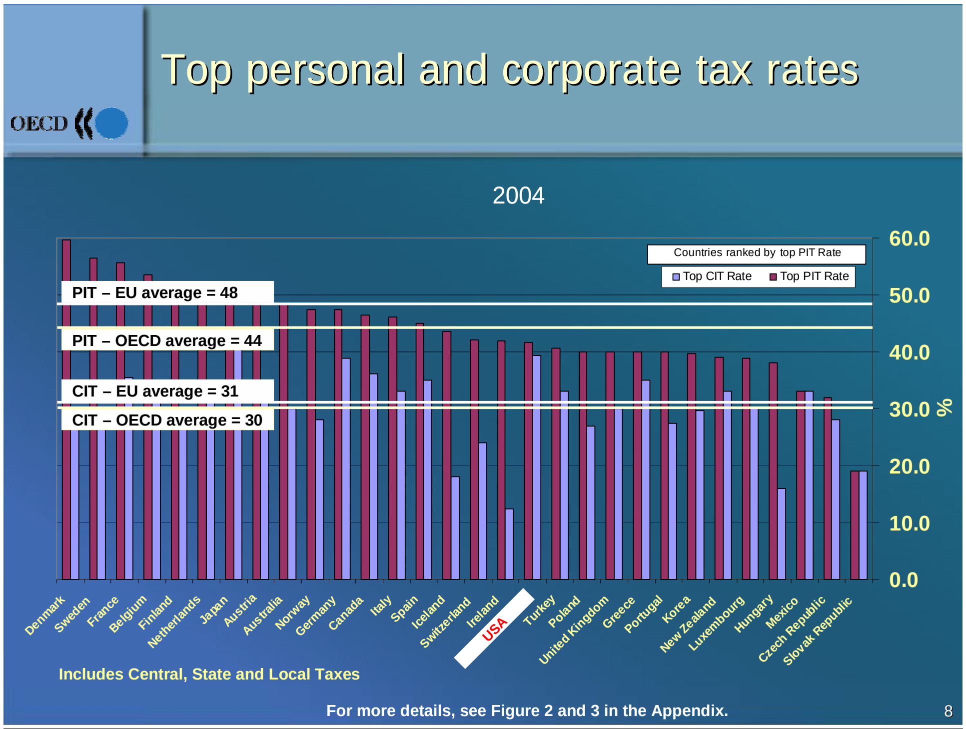
Top personal and corporate tax rates
OECD
2004
Countries ranked by top PIT Rate
Top CIT Rate
Top PIT Rate
PIT – EU average = 48
PIT – OECD average = 44
CIT – EU average = 31
CIT – OECD average = 30
60.0
50.0
40.0
30.0
20.0
10.0
0.0
%
Denmark
Sweden
France
Belgium
Finland
Netherlands
Japan
Austria
Australia
Norway
Germany
Canada
Italy
Spain
Iceland
Switzerland
Ireland
USA
Turkey
Poland
United Kingdom
Greece
Portugal
Korea
New Zealand
Luxembourg
Hungary
Mexico
Czech Republic
Slovak Republic
Includes Central, State and Local Taxes
For more details, see Figure 2 and 3 in the Appendix.
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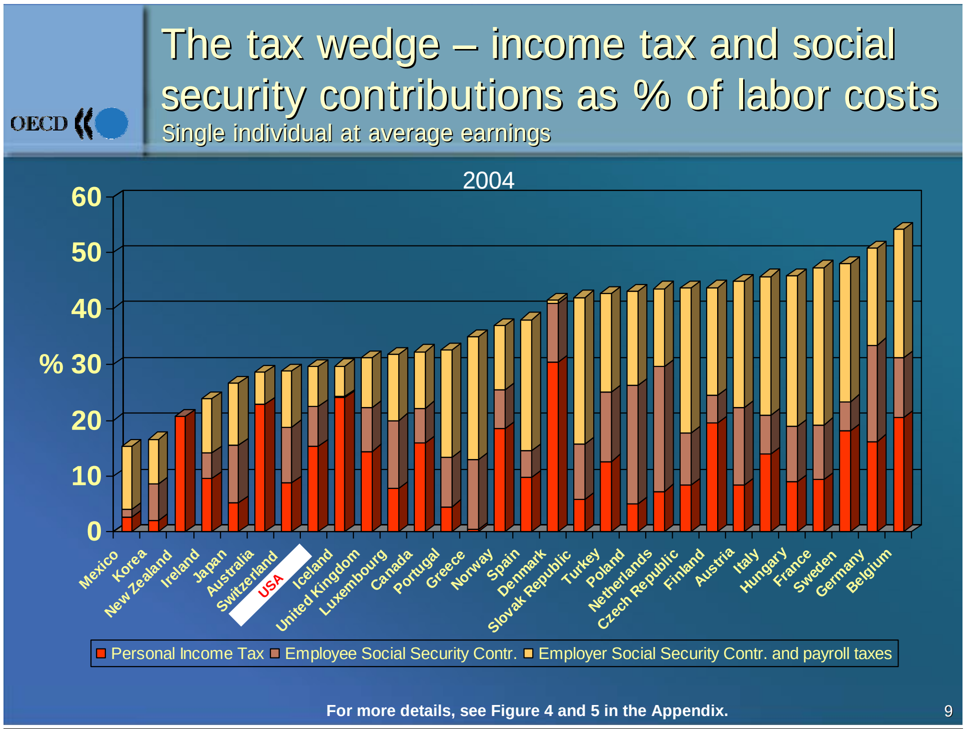
OECD
The tax wedge – income tax and social security contributions as % of labor costs
Single individual at average earnings
2004
%
0
10
20
30
40
50
60
Mexico
Korea
New Zealand
Ireland
Japan
Australia
Switzerland
USA
Iceland
United Kingdom
Luxembourg
Canada
Portugal
Greece
Norway
Spain
Denmark
Slovak Republic
Turkey
Poland
Netherlands
Czech Republic
Finland
Austria
Italy
Hungary
France
Sweden
Germany
Belgium
Personal Income Tax
Employee Social Security Contr.
Employer Social Security Contr. and payroll taxes
For more details, see Figure 4 and 5 in the Appendix.
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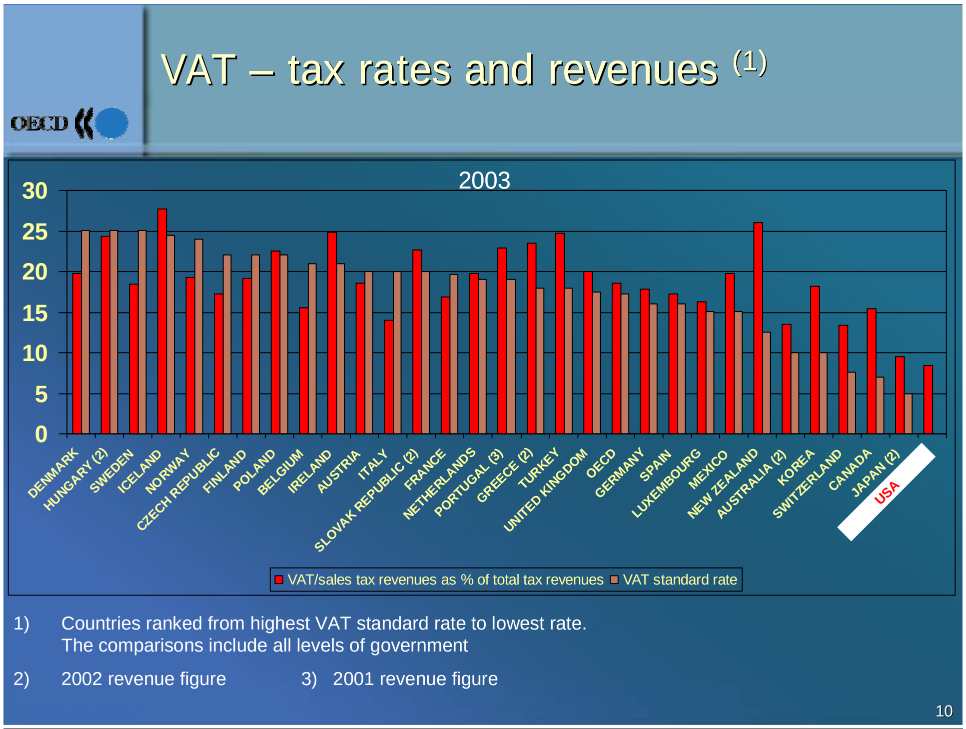
VAT – tax rates and revenues (1)
OECD
2003
30
25
20
15
10
5
0
DENMARK
HUNGARY (2)
SWEDEN
ICELAND
NORWAY
CZECH REPUBLIC
FINLAND
POLAND
BELGIUM
IRELAND
AUSTRIA
ITALY
SLOVAK REPUBLIC (2)
FRANCE
NETHERLANDS
PORTUGAL (3)
GREECE (2)
TURKEY
UNITED KINGDOM
OECD
GERMANY
SPAIN
LUXEMBOURG
MEXICO
NEW ZEALAND
AUSTRALIA (2)
KOREA
SWITZERLAND
CANADA
JAPAN (2)
USA
VAT/sales tax revenues as % of total tax revenues
VAT standard rate
1) Countries ranked from highest VAT standard rate to lowest rate.
The comparisons include all levels of government
2) 2002 revenue figure
3) 2001 revenue figure
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Successful Tax Reform Requires Administrative Reform

- Tax administrations face challenges due to globalization
  - proliferation of tax shelters and abuse of tax havens
  - changing attitudes towards compliance
- The response of OECD tax administrations
  - move to integrated tax administrations
  - administration by segment/function rather than by type of tax
  - move to cumulative withholding and information reporting
  - improved risk management
  - better access to information
  - Use of new technologies
- Good compliance requires good taxpayer service and effective enforcement
- Putting tax compliance on the good corporate governance agenda

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Key Elements for successful tax reform: Experience of OECD Countries

- Political champions who can mobilize popular support
- Clear and well-articulated principles
- A package approach, with gains and pains intricately linked
- Policy reform matched by administrative reform
- Limited time between announcement and full implementation
- Transition rules matter
- Education and guidance package available from Day One

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ANNEX

Tax Reform: An International Perspective [1]

1 Introduction

Since the mid-1980s all OECD countries have engaged in fundamental reforms of their tax systems. These reforms have been driven by the need to provide a more competitive fiscal environment: one which encourages investment, risk-taking and entrepreneurship and provides increased work incentives. At the same time, governments are aware of the need to maintain taxpayers' faith in the integrity of their tax systems. Fairness and simplicity have become the byword of reformers. Fairness requires that taxpayers in similar circumstances pay similar amounts of tax and that the tax burden be appropriately shared. Simplicity requires that paying your taxes becomes as easy as possible and that the administrative and compliance costs of collecting taxes be kept at a minimum.

Almost all the income tax reforms of the last two decades can be characterized as rate reducing and base broadening reforms, following the lead given by the United Kingdom in 1984 and the United States in 1986. In the mid-1980s, most OECD countries had top marginal income tax rates in excess of 65 per cent. Today most OECD countries have top rates below, and in some cases substantially below, 50 per cent. Similarly, top statutory corporate income tax rates were rarely less than 45 per cent, while today the OECD average is below 30 per cent and an increasing number fall below 25 per cent.

These reforms, however, did not, until recently, lead to a fall in the overall tax burden (measured by the tax-to-GDP ratio). From 1975 to 2000, most OECD countries experienced an increase in this ratio. Some, like Finland and France, saw the tax burden increase by almost a third. A small number of countries – notably the United Kingdom and the United States – found themselves at the end of these three decades with the same tax burden as in 1975. It does appear, however, that this long-term upward trend peaked in 2000 and the latest figures available to the OECD suggest that most countries are now below the peak 2000 level.

Most reforms have also tried to shift the balance in the tax structure from taxes on income and profits towards taxes on consumption – a process facilitated by the increased use of value added taxes (the United States is now the only OECD country without this form of consumption tax). No OECD country has abandoned the income tax in favor of consumption taxes.

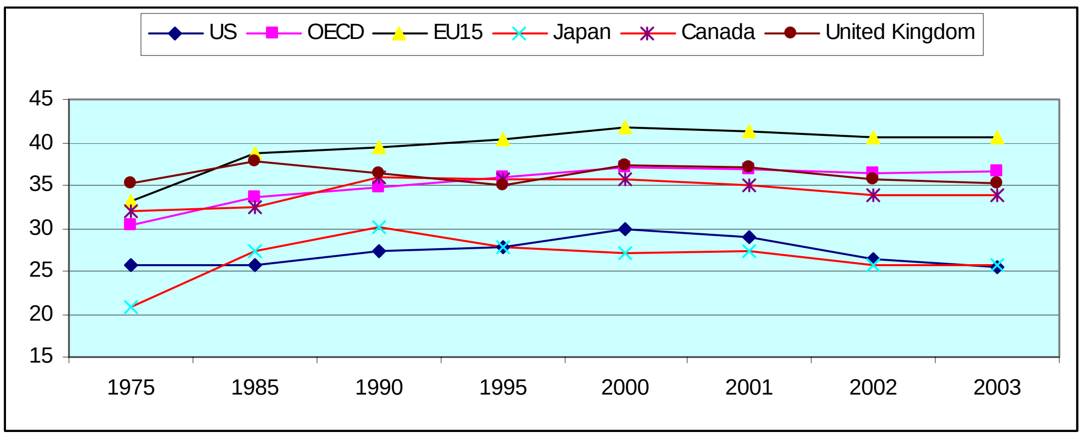
1 The views expressed in this paper do not necessarily reflect the views of the OECD Member countries, although the reports upon which the paper is based have been approved by all 30 OECD countries (listed in Table 1). This note is an updated and expanded version of a paper presented at the 67th Annual Meeting of the Tax Foundation in Washington in November 2004.

2 The Recent Downward Trend in Tax Revenues and Rates

2.1 Tax Revenues

The evolution of tax revenue as a percentage of GDP in OECD countries since 1975 is shown in Figure 1. Between 1975 and 2000, there had been a persistent and largely unbroken upward trend in the ratio of tax to GDP across most of the OECD area. However, the unweighted OECD average peaked at 37.2 per cent in 2000 and then fell to 36.8 per cent in 2001 and 36.3 per cent in 2002. No overall OECD ratio is yet available for 2003 but provisional figures suggest a break in this downward trend, possibly in part reflecting stronger economic growth.

Figure 1 Tax-to-GDP Ratios in the OECD-area. 1975-2003[1]



1) 2003 figures are lacking for some countries, including Japan. For such countries 2002 figures are used.

Source: OECD Revenue Statistics 1965-2003.

Despite this possible break in the trend, a number of countries experienced large reductions in tax-to-GDP ratios between 2000 and 2003, as illustrated in Table 1. The United States, for example, saw a reduction of 4.5 percentage points in its tax-to-GDP ratio, from 29.9 per cent to 25.4 per cent. Substantial reductions were also experienced in Finland (3.1 percentage points), Sweden (3.0 percentage points), the Netherlands (2.4 percentage points), Ireland (2.2 percentage points) and the United Kingdom (2.1 percentage points). No country experienced increases in its tax-to-GDP ratio of more than 1.5 percentage points over the same period.

The overall tax burden in the US in 2003 was almost exactly the same as it was in 1975, whereas most other developed OECD economies experienced significant increases. Long run stability in the US tax burden may reflect choices made as to how to finance social welfare, retirement benefits and education (in Europe these are primarily financed by taxes), inter-state competition in the US, the lack of a robust consumption tax and attitudes towards the role of government.

Table 1 Total Tax Revenue as Percentage of GDP

	1975	1985	1990	1995	2000	2001	2002	2003 Provisional
Canada	**31.9**	**32.5**	**35.9**	**35.6**	**35.6**	**35.0**	**33.9**	**33.9**
Mexico	n.a	17.0	17.3	16.7	18.5	18.8	18.1	19.5
United States	**25.6**	**25.6**	**27.3**	**27.9**	**29.9**	**28.9**	**26.4**	**25.4**
Australia	26.5	29.1	29.3	29.6	31.8	30.4	31.5	n.a
Japan	**20.8**	**27.4**	**30.2**	**27.8**	**27.1**	**27.4**	**25.8**	n.a
Korea	14.5	16.0	18.1	19.4	23.6	24.1	24.4	25.5
New Zealand	28.5	31.3	37.7	37.0	33.4	33.3	34.9	34.8
Austria	37.4	41.9	40.4	41.6	43.4	45.2	44.0	43.0
Belgium	40.6	45.6	43.2	44.8	45.7	45.9	46.4	45.8
Czech Republic	n.a	n.a	n.a	39.8	39.0	38.5	39.3	39.9
Denmark	40.0	47.4	47.1	49.4	49.6	49.9	48.9	49.0
Finland	36.8	40.2	44.3	46.0	48.0	46.0	45.9	44.9
France	35.9	43.8	43.0	43.9	45.2	44.9	44.0	44.2
Germany [1]	35.3	37.2	35.7	38.2	37.8	36.8	36.0	36.2
Greece	21.8	28.6	29.3	32.4	38.2	36.6	35.9	n.a
Hungary	n.a	n.a	n.a	42.4	39.0	39.0	38.3	n.a
Iceland	29.7	28.5	31.5	31.8	39.4	38.1	38.1	40.3
Ireland	29.1	35.0	33.5	32.8	32.2	30.1	28.4	30.0
Italy	26.1	34.4	38.9	41.2	43.2	43.0	42.6	43.4
Luxembourg	37.5	45.1	40.8	42.3	40.2	40.7	41.8	41.6
Netherlands	41.3	42.8	42.9	41.9	41.2	39.8	39.2	38.8
Norway	39.3	43.1	41.5	41.1	43.2	43.4	43.5	43.9
Poland	n.a	n.a	n.a	37.0	32.5	31.9	32.6	n.a
Portugal	20.8	26.6	29.2	33.6	36.4	35.6	33.9	n.a
Slovak Republic	n.a	n.a	n.a	n.a	34.0	31.6	33.1	n.a
Spain	18.8	27.8	33.2	32.8	35.2	35.0	35.6	35.8
Sweden	42.0	48.2	53.2	48.5	53.8	51.9	50.2	50.8
Switzerland [2]	27.0	25.8	26.0	27.8	30.5	30.0	30.3	29.8
Turkey	16.0	15.4	20.0	22.6	32.3	35.1	31.1	32.9
United Kingdom	35.3	37.7	36.5	35.0	37.4	37.2	35.8	35.3
Unweighted average:								
OECD Total	**30.3**	**33.6**	**34.8**	**35.9**	**37.2**	**36.8**	**36.3**	-
OECD America	28.8	25.0	26.8	26.7	28.0	27.6	26.1	26.2
OECD Pacific	22.6	26.0	28.8	28.5	29.0	28.8	29.1	-
OECD Europe	32.1	36.6	37.4	38.5	39.9	39.4	38.9	-
EU 15	**33.2**	**38.8**	**39.4**	**40.3**	**41.8**	**41.2**	**40.6**	-

1) Unified Germany beginning in 1991. Starting in 2001, Germany has revised its treatment of non-wastable tax credits in the reporting of revenues to bring it into line with the OECD guidelines.
2) The source for the 1975 figure is Swiss authorities, due to a change in the methodology which is only implemented in OECD Revenue Statistics from 1985 onwards.

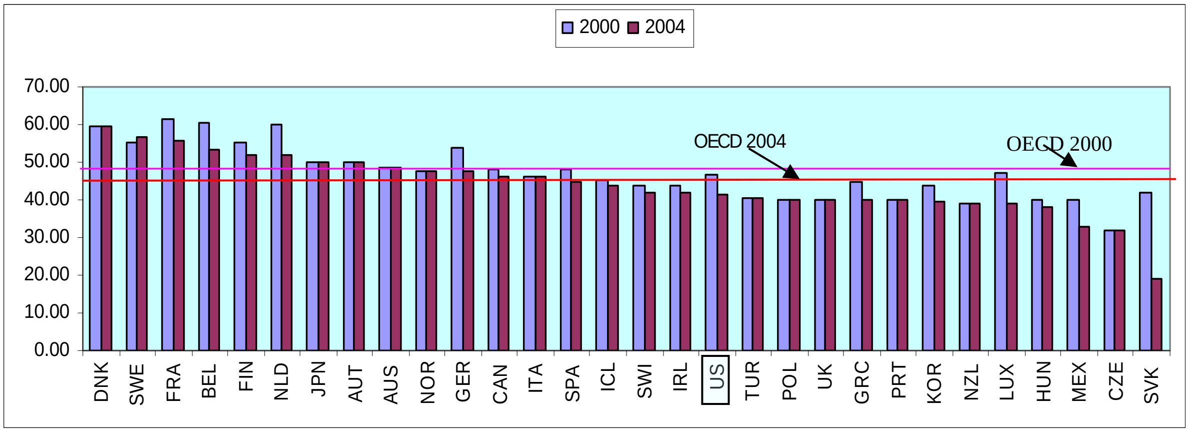
Source: Revenue Statistics 1965-2003 and Swiss authorities.

2.2 Personal and Corporate Income Tax Rates

One of the main factors behind the reductions in tax revenues since 2000 has been reductions in the marginal rates of personal and corporate income tax. Indeed, all of the countries with decreases of more than two percentage points in their tax-to-GDP ratios have significantly cut income taxes, particularly personal income taxes.

Figure 2 shows that the marginal statutory personal income tax rates for individuals with high wage income were eased between 2000 and 2004. The unweighted OECD-average was reduced by about 3.1 percentage points, and by about the same in the EU15. The rates were reduced by more than 1 percentage point in 17 countries. Sweden is the only country where this rate (slightly) increased. The rate was reduced by 5 percentage points or more in Belgium, France, Germany, Greece, Luxembourg, Mexico, Netherlands and the Slovak Republic.

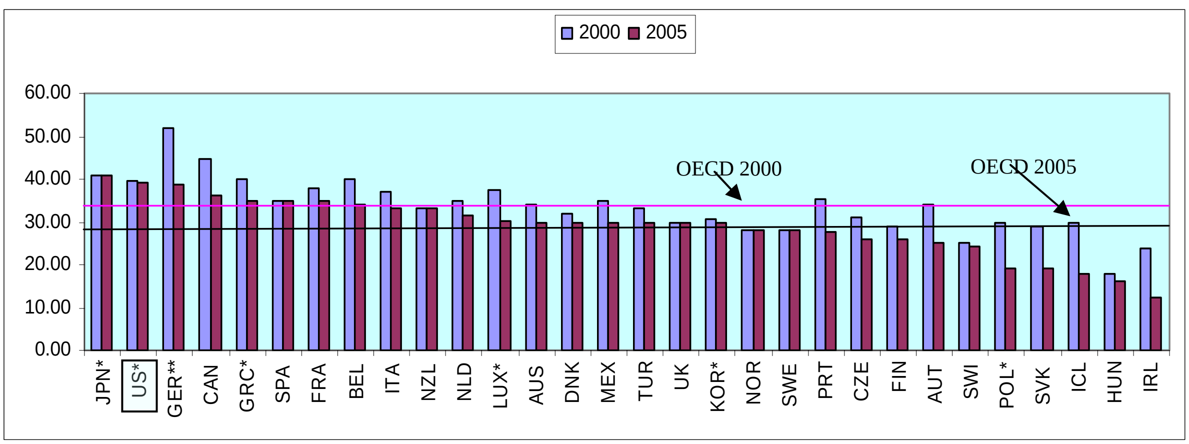
Figure 2 Top Statutory Personal Income Tax Rates on Wage Income. 2000 and 2004



Source: OECD Tax Database[2].

The picture is less clear, although similar, when comparing the "all-in" effective marginal tax rates, i.e. including both income taxes and employee social security contributions and taking account of standard tax credits, tax allowances and ceilings for social security contributions. On average, the top "all-in" tax rates were reduced by 1.2 percentage points in OECD and by 0.8 percentage points in the EU15.

Figure 3 Statutory Corporate Income Tax Rates. 2000 and 2005[1]



1) 2004 figures for countries marked * (for the US sub-central rates in 2005 are assumed to be equal to those in 2004). The government in Germany (**) has recently proposed to reduce the federal rate from 25 to 19 per cent, which will reduce the combined rate to from 38.9 to 33.6 per cent if implemented.

Source: OECD Tax Database.

The general trend towards reduced tax rates is even more pronounced in respect of corporate income tax rates. Figure 3 shows that the statutory corporate income tax rates in OECD Member countries dropped on average by 4.6 percentage points between 2000 and 2005, from 33.6 per cent to

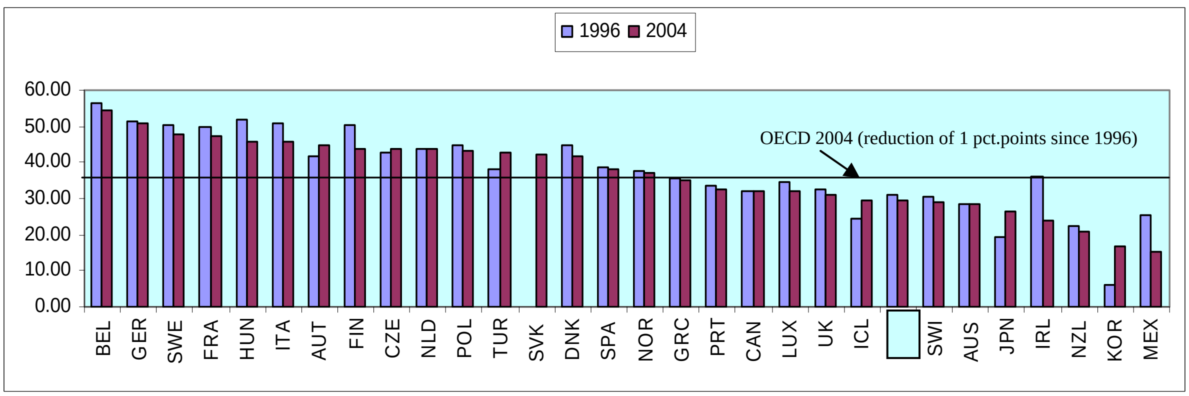
2 See http://www.oecd.org/ctp/taxdatabase.

29 per cent. This trend seems to be widespread, as rates have been reduced in 24 countries and in none of the OECD countries was the rate increased. In the EU15 countries, the unweighted average corporate tax rate dropped by an average of 5 percentage points, from 35.1 per cent to 30.1 per cent.

2.3 Taxation of Labor

The tax wedge is the sum of income taxes and employee and employer social security contributions expressed as a percentage of what employers have to pay in wages and social security charges. Figure 4 compares the tax wedge for a single worker at average earnings of a production worker for OECD countries in 1996 and 2004. The unweighted OECD average has decreased by 1 percentage point since 1996, while the unweighted EU15 average fell by 2.5 percentage points. This rate fell by 1.5 percentage points in the United States and by 1.4 percentage points in the United Kingdom during the same period, while the tax wedge increased by 7.6 percentage points in Japan and remained fairly stable in Canada. Although the largest reduction was in the EU15 area, the average rate in 2004 was still 4.3 percentage points higher than the OECD average and substantially above the levels in the United States, Canada and Japan.

Figure 4 Tax Wedge for Single Individual at Average Earnings[1]. 1996 and 2004

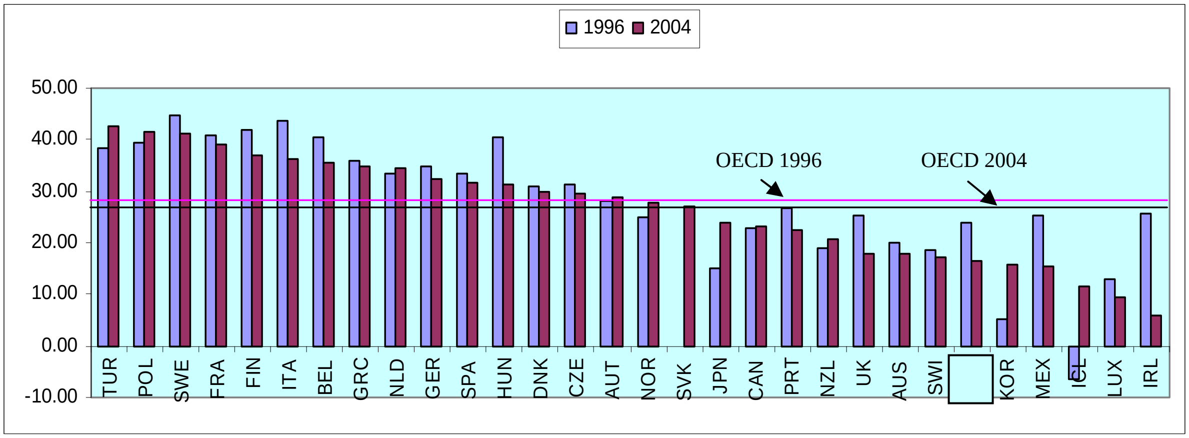


1) The tax wedge is the sum of income tax plus employee and employer social security contributions as a percentage of total labor costs (gross wage plus employer social security contributions).

Source: Taxing Wages 2003-2004.

The tax wedge can also be calculated to take account of standard cash benefits and tax credits for families and for children, and thereby pick up the effects of the increasing use of the tax system as a vehicle to deliver social benefits in many countries. Figure 5 illustrates the development in the tax wedge, including income tax plus employee and employer social security contributions and less cash benefits, for a married couple with one earner at average earnings and two children. The figure shows the wedge fell on average by 1.6 percentage points between 1996 and 2004, from a level of 28.2 per cent. Although the reduction of the unweighted EU15-average was substantially larger than that of the OECD (4.2 percentage points), the tax wedge in 2003 was still 2.5 percentage points above the OECD-average. For this family type, the tax wedge was substantially reduced in the United States and the United Kingdom (by 7.5 and 7.4 percentage points respectively), while it increased by 0.3 percentage points in Canada and by 8.8 percentage points in Japan.

Figure 5 Tax Wedge for One-earner Family with Two Children at Average Earnings[1]. 1996 and 2004



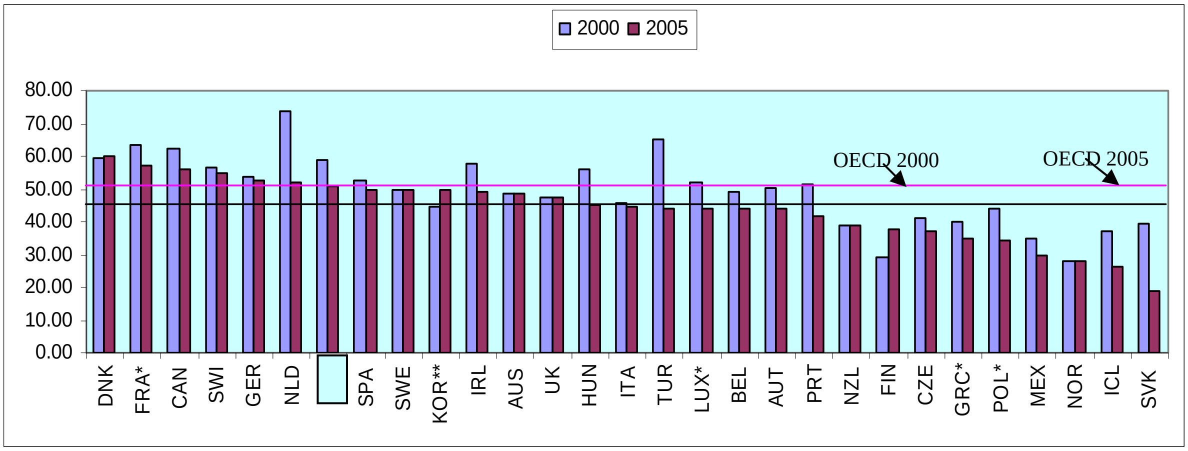
1) The tax wedge is the sum of income tax plus employee and employer social security contributions less cash benefits as a percentage of total labor costs (gross wage plus employer social security contributions).

Source: Taxing Wages 2003-2004.

2.4 Taxation of Dividends

The rate of taxation on dividends has been of particular interest in recent years, given policy interest in reconsidering the relative advantages, disadvantages and methods of integrating corporate and personal level taxation of distributed income. Figure 6 reports the top marginal statuary tax rates on distributions of domestic source profits to a resident individual shareholder, taking account of the fact that profits are usually taxed both at the corporate level and again when they are distributed as dividends (although double taxation may be reduced by introducing imputation systems, tax credits or reduced tax rates on dividends). The figure shows that, the unweighted average top marginal tax rate on dividends in OECD countries was reduced by 5.3 percentage points between 2000 and 2005, from 49.9 per cent to 44.6 per cent. In the EU15, the unweighted average top marginal tax rate fell by 4.4 percentage points, from 51.7 per cent to 47.3 per cent. The reduction of this tax rate was 8.3 percentage points in the United States, due to the introduction of a reduced tax rate on dividends at the personal level.

Figure 6 Top Statutory Marginal Tax Rates on Dividend Income[1,2].



1) This is the overall (corporate plus personal) top marginal tax rates on distributions of domestic source profits to a resident individual shareholder, taking account of imputation systems, dividend tax credits etc.

2) 2004 figures for countries marked * (for the US sub-central rates in 2005 are assumed to be equal to those in 2004), 2003 for countries marked **. The rate in Germany will fall from 52.4 to 48.3 per cent if the proposed reduction of the federal corporate income tax rate to 19 per cent is implemented.

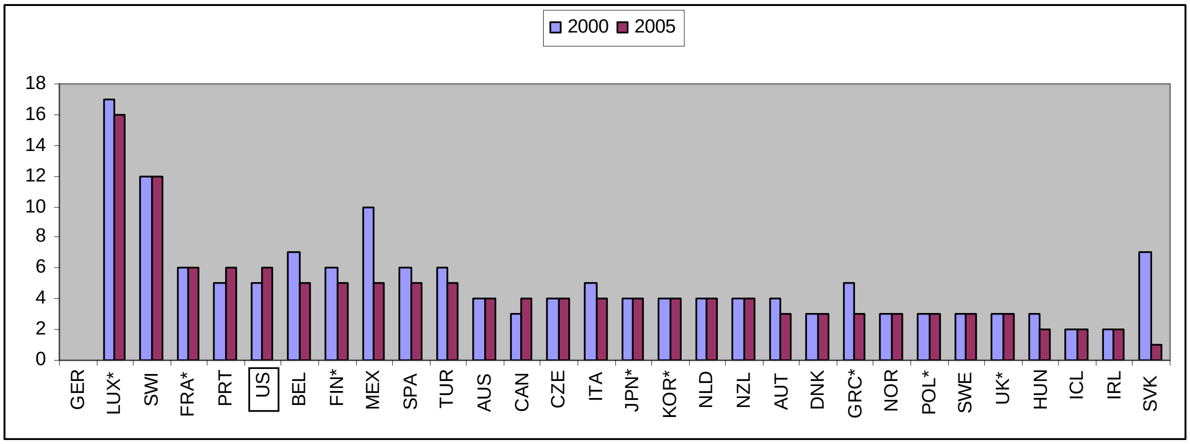
Source: OECD Tax Database.

2.5 Other Aspects of Personal Income Taxation

Figure 2 illustrated the personal income tax rate for high wage earners. For many OECD countries this is also the top marginal personal income tax rate on capital income. However, most OECD countries apply lower rates for certain types of capital income, in particular income from dividends and capital gains, than the general income tax rate. In addition, some other countries apply a lower general personal income tax rate on capital income than on wage income (most notably the dual income tax system in Finland, Norway and Sweden and the "Box" system in the Netherlands, but several other European countries also apply a flat tax rate on capital income which is lower than the top rate on wage income). Figure 2 can therefore not be used to compare the taxation of capital income at the personal level between countries.

Figure 7 illustrates yet another feature of personal income tax systems where countries differ substantially, namely the number of brackets in the taxation of wage income. The number of brackets in the personal income tax system varies from just 1 positive rate in the Slovak Republic to 16 in Luxembourg. Most countries apply a piecewise linear system, with Germany being the only country that has a formula-based system where the marginal tax rate increases continuously with income between a minimum and a maximum rate. Eleven countries (Austria, Belgium, Finland, Greece, Hungary, Italy, Luxembourg, Mexico, Slovak Republic, Spain and Turkey) reduced the number of tax brackets between 2000 and 2005, while the number of income brackets was increased in Canada, Portugal and the United States. The Slovak Republic is the first OECD country to introduce a single positive tax rate on all personal (and corporate) income above a basic threshold beginning in 2004[3]. The Polish government has recently announced its intention to introduce a similar system as of 2008.

Figure 7 The Number of Brackets in the Taxation of Wage Income. 2000 and 2005



1) 2004 figures for countries marked *.

Source: OECD Tax Database and OECD Taxing Wages 2003-2004.

2.6 Value Added Taxes[4]

Value Added Tax (VAT) is now the most widespread consumption tax collection mechanism in the world. Since Australia's successful adoption of the Goods and Services Tax (GST; equivalent to VAT) as of July 2000, all OECD Member countries - with the exception of the United States - now operate VAT systems. Figure 8 shows that the standard rates range from 5 per cent in Japan to 25 per cent in Denmark, Hungary and Sweden. Figure 8 also illustrates that VAT has become a significant contributor to total tax revenues in many OECD countries. The average share of value added taxes as a percentage of total tax revenues was about 18 per cent in 2003, whereas revenues from sales taxes in the United States were about 8 per cent of total tax revenues. There has been a clear trend to move to general consumption taxes combined with a reduction in tax revenues from excise taxes. The overall share of total tax revenue from general consumption taxes has remained fairly stable over the past few years, although it has increased when compared with the situation in the mid-1970s.

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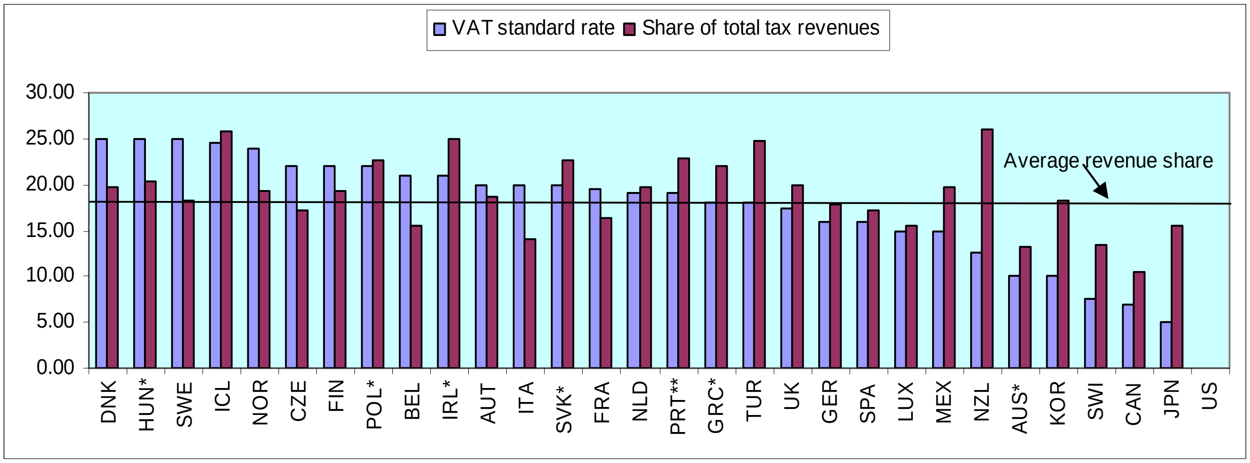
3 Iceland also applies a flat income tax rate above a threshold (the rate was 37.73 per cent in 2005). However, they have an additional surtax of 2 per cent (which has been gradually reduced from 7 per cent in 2002) that is levied on income above a threshold level that is equal to about 150 per cent of average earnings.

4 This section is mainly based on *The Value Added Tax – Experiences and Issues* (background paper for a joint IMF/World Bank/OECD conference on VAT, held in Rome March 15-16, 2005, http://www.itdweb.org/VATConference). See also OECD (2005): *Consumption Tax Trends*, 2004 edition for a discussion of value added tax systems in OECD countries.

Figure 8 Standard Rates of Value Added Tax and Share of Total Tax Revenues. 2003[1]



1) 2002 revenues for countries marked * and 2001 revenues for countries marked **.
Source: OECD Tax Database and Revenue Statistics 1975-2003.

Whichever name is assigned to it - VAT or GST - the system is based on tax collection in a staged process, with successive taxpayers entitled to deduct input tax on purchases and account for output tax on sales (see Box 1). Each business in the supply chain takes part in the process of controlling and collecting the tax, remitting the proportion of tax corresponding to the margin realized on each transaction, or the difference between the value added tax paid out to suppliers and the value added tax charged to customers. Beyond this, the value added tax systems observed in practice exhibit considerable diversity regarding e.g. the base of the tax and the range of economic activity to which the tax applies. As a result, there can be room for disagreement as to whether a given tax is properly called a VAT or not. Here VAT is defined as a *broad-based tax levied on sales up to and including, at least, the manufacturing stage, with systematic offsetting of tax charged on inputs - except perhaps on capital goods - against that due on outputs*.

While there are many variations on the structure of the VAT and how it is implemented, there is wide agreement on some core issues. First, the consensus favors ensuring that the final base of the tax is consumption. Such a VAT, which requires that tax on capital goods be credited, does not distort the prices that producers face in buying and selling from one another, and, accordingly, has the desirable feature of preserving production efficiency (so that the tax does not move the economy off its production possibility frontier). Given that it is levied at each stage of production, ensuring that the VAT bears only on consumption also requires both full crediting of the tax paid on inputs and the absence of breaks in the VAT chain. The exemption of inputs causes such breaks (see Box 1).

There is also broad international agreement that the invoice credit method[5] should be used (Japan being a notable exception). There are several reasons for this, but most notably that by explicitly linking the tax credit on the purchaser's inputs to the tax remitted by the supplier of those inputs, it discourages fraudulent undervaluation of intermediate sales.

5 Under this method, each trader charges output tax at the specified rate on each sale and gives the purchaser an invoice showing the amount of tax thus charged. Traders can then credit such payment of input tax on their own purchases against the output tax charged on their sales, remitting the balance to the authorities (or, if the net balance is negative, claiming a refund).

The VAT was initially developed to meet rising revenue requirements that could not easily be satisfied by existing turnover taxes, the cascading nature of which could seriously distort economic decisions.[6] The adoption of the VAT, which started in France (in several steps from 1948), began slowly, but the pace has subsequently accelerated. The adoption of VAT as a requirement for entry to the European Union - where a primary attraction of the tax was the ability to transparently eliminate indirect taxation (or subsidization) of exports - prompted its expansion in the developed countries in that region (including non-member countries such as Norway and Switzerland, and, more recently, accession countries).

Box 1. A Primer on the VAT

The key features of the VAT are that it is a broad-based tax levied at multiple stages of production, with—crucially—taxes on inputs credited against taxes on output. That is, while sellers are required to charge the tax on all their sales, they can also claim a credit for taxes that they have been charged on their inputs. The advantages of this is that revenue is secured by being collected throughout the process of production (unlike a retail sales tax) but without distorting production decisions (as a turnover tax does).

Suppose, for example, that firm A sells its output (produced using no inputs) for a price of US$100 (excluding tax) to firm B, which in turn sells its output for US$400 (again excluding tax) to final consumers. Assume now that there is a VAT at a 10 percent rate. Firm A will then charge Firm B US$110, remitting US$10 to the government in tax. Firm B will charge final consumers US$440, remitting tax of US$30: output tax of US$40 less a credit for the US$10 of tax charged on its inputs. The government thus collects a total of US$40 in revenue. In its economic effects, the tax is thus equivalent to a 10 percent tax on final sales (there is no tax incentive, in particular, for B to change its production methods or for the two firms to merge), but the method of its collection secures the revenue more effectively.

Zero rating refers to a situation in which the rate of tax applied to sales is zero, though credit is still given for taxes paid on inputs. In this case, the firm will be due a full refund of taxes paid on inputs. In a VAT designed to tax domestic consumption only, exports are zero rated, meaning that exports leave the country free of any domestic VAT. This destination principle and is the international norm in indirect taxation, with total tax paid on a good being determined by the rate levied in the jurisdiction of its final sale and revenue accruing to that jurisdiction. The alternative to destination-based taxation is origin-based taxation, under which the tax is paid at the rate of, and to, the country or countries in which the item is produced rather than consumed.

Exemption is quite different from zero rating in that, while tax is also not charged on outputs, tax paid on inputs cannot be reclaimed. Thus, no refunds are payable. In this case, because tax on intermediate transactions remains unrecovered, production decisions may be affected by the VAT.

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6 Since a turnover tax is levied on turnover irrespective of value added, the tax collected on a given commodity will reflect the number of taxable stages in the chain of its production, resulting in a “cascading” tax burden. This gives producers an incentive to substitute away from taxed inputs, resulting in production methods that are privately profitable but inefficient from a wider social perspective. As a result, and as a further distortion, there is an incentive for industries to integrate vertically solely to reduce tax liabilities.

It is sometimes argued that the VAT is a particularly complex and costly tax to comply with and administer. However, the real issue is how the VAT fares in comparison with other taxes for similar amounts of revenue. This will depend on the costs involved in its operation. These resource costs can be broken down into the administrative costs incurred by tax authorities and the compliance costs incurred by taxpayers. Given the potential role of the VAT as a catalyst for change both within tax collection agencies and among taxpayers (e.g., by stimulating a culture of record keeping), a VAT may involve substantial collection costs, especially at the outset, but still be very successful.

Collection costs appear to be significantly lower where there is a single rate applied to a broad base and high threshold. Since compliance costs are largely independent of the amount of tax payable, however, they fall more heavily on smaller traders. This is borne out by a recent European Commission staff working paper, which suggests significant differences in costs for small and medium sized enterprises (2.6 percent of sales) and those for large companies (0.02 percent of sales). The evidence for developed countries suggests that the VAT is less costly than the income tax, but the more relevant question is whether it is more or less costly than alternative forms of sales tax, and, in particular, than the taxes that it replaced.

3 Tax administration

Successful policy reform must include consideration what is administratively feasible. It is, therefore, of interest when looking at tax reform to also examine recent changes in tax administration practices. This section draws on work of the OECD's Forum on Tax Administration, including a number of publicly-released documents: '*Tax Administration in OECD Countries: Comparative Information Series (2004)*' and '*Compliance Risk Management: Managing and Improving Tax Compliance*'.[7]

Institutional arrangements for revenue administration

Governments in OECD countries have established a variety of institutional arrangements for the administration of tax laws. These include the creation of unified and semi-autonomous bodies (in 15 OECD countries) with a broad range of powers that are responsible for the administration of most, if not all federal/national taxes; single directorates with little autonomy within the formal structure of the ministry of finance (in 6 countries); and multiple directorates with little autonomy within the formal structure of the Ministry of Finance (in 9 OECD countries). To a large extent, these varied institutional arrangements reflect underlying differences in the political structures and systems of public sector administration in countries, as well as longstanding historical practice. In 11 countries, the tax administration is also responsible for the collection and enforcement of social contributions, while in 17 countries the collection and enforcement of these has been entrusted to a separate body. In six OECD countries, there is a unified body responsible for both tax and customs administration operations, but there does not appear to be any trend in this direction. There is, however, a clear trend to allocate other tasks of a non-taxation nature to the national tax administration. Such tasks include government valuation tasks, the payment of various social welfare benefits, the collection of non-tax government debts (e.g. child support, student loans), and the maintenance of population registers.

Organization of tax administration operations

The earliest organizational model employed by tax administrations was based principally on "type of tax" criterion. This entailed the operation of separate multi-functional departments for each tax that were largely self-sufficient and independent of each other. While this model served its purpose, it was eventually seen to have numerous shortcomings, including: (1) an inherent duplication of functions; (2) inconvenience

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7 These documents may be found at http://www.oecd.org/ctp.

for taxpayers with multiple tax dealings; (3) complicated compliance management implications; (4) a propensity for uneven and inconsistent treatment of taxpayers across taxes; and (5) under-utilization of staff. To address these sorts of problems, tax administrators have resorted to organizing their operations largely on a 'functional' basis.

Under the 'functional' approach, staff are organized principally by functional groupings (e.g. registration, accounting, information processing, audit, collection, appeals, etc.) and generally work across taxes. This approach to organizing tax work was introduced to enable greater standardization of work processes across taxes, to simplify computerization and arrangements for taxpayers, and to generally improve efficiency. Today, over two-thirds of OECD countries have adopted the functional model as the primary method for structuring tax administration operations.

A more recent trend among a number of OECD countries has been to organize operations principally around 'taxpayer segments' (e.g. large businesses, small/medium businesses, wage earners, etc.). The rationale for organizing operations around taxpayer segments is that each group of taxpayers has different characteristics and tax compliance behaviors and, as a result, presents different risks to the revenue. This is the model that was adopted by the US Internal Revenue Service, as part of the 1998 Restructuring Act. Proponents of the 'taxpayer segment' type of structure contend that grouping key functional activities within a unified and dedicated management structure increases the prospects of improving overall compliance levels. While application of the 'taxpayer segment' model is still in its early stages of use, many countries have partially applied this approach by establishing large taxpayer units to fully administer the affairs of their largest taxpayers.

Improving taxpayer compliance

The fundamental goal of all revenue authorities is to improve the overall level of compliance with the tax laws. This is by no means a straightforward task given, among other things, the complexities of many taxpayers' affairs, the population of taxpayers to be administered with available resources, and the many and varied forms of non-compliance behavior to be addressed (e.g. unreported income, over-claimed deductions, fraudulent VAT refunds, non-payment of debts, and non-filing of returns) and the increased ease of access to tax havens and bank secrecy jurisdictions.

There has been a trend in recent years in more advanced OECD countries to adopt a more strategic approach to managing these risks, applying modern risk management techniques. This development has been in line with the adoption of modern corporate governance practices, gives recognition to the fact that the more serious tax compliance risks require a range of treatment strategies, and has been found to be a useful way of communicating to staff what the revenue body is trying to do and what is expected of them.

In practical terms, the application of this more strategic approach has led to better targeting of compliance improvement efforts, more effective matching of compliance improvement strategies with the underlying behavior to be addressed and, for some countries, demonstrated improvements in specific areas of taxpayers' compliance.

Tax return filing and payment regimes

The administrative workloads of tax authorities are to a large extent influenced by the nature of the systems in place for collecting and paying taxes, and the filing of associated tax returns, and the optimal use of modern technology.

Concerning tax payment, withholding systems are the cornerstone of personal income tax collection in respect of salary and wage income in all but two OECD countries (France and Switzerland). Withholding mechanisms are also applied in the majority of OECD countries to dividend and interest income paid to resident taxpayers. For income that is not subject to withholding, virtually all countries rely on a system of advance payments requiring the progressive (i.e. generally monthly or quarterly) payment of tax commencing in the year that the income is earned.

Concerning return filing obligations for wage earners, a variety of arrangements have evolved in OECD countries, each with significantly different compliance burdens for taxpayers and employers, and administrative costs for tax authorities. These arrangements fall into four distinct categories: 1) cumulative withholding systems administered by employers that generally obviate the need for employees to file annual tax returns (operating in 15 OECD countries); 2) cumulative withholding systems administered by employers coupled with the preparation of returns by the tax authority for the taxpayers' confirmation, the majority of which in practice do not require further adjustment by taxpayers (operating in 4 Nordic OECD countries, and being tested elsewhere); 3) non-cumulative withholding systems requiring the annual preparation and filing of tax returns by taxpayers (operating in 9 countries); and 4) no withholding, with taxpayers required to make advance payments (2 countries).

Advances in technology in recent years have significantly facilitated employers' administration of withholding regimes (both cumulative and non-cumulative type arrangements), while at the same time enabling taxpayers and tax professionals in many countries to prepare and file their returns electronically (see later comments).

Delivery of service and use of technology

An effective program of taxpayer services is critical to the effectiveness of all revenue authorities. The general complexity of tax laws coupled with the population of taxpayers to be administered mean that, fundamentally, all revenue authorities must rely substantially on taxpayers' voluntary compliance to achieve the outcomes expected of them. It is axiomatic that to achieve high levels of voluntary compliance, taxpayers and their representatives must receive high quality services to help them determine their obligations under the laws and to complete the steps required to fulfill those obligations.

Particularly over the last decade or so, the goal of improving voluntary compliance has led many revenue authorities to adopt a more strategic approach to the provision of services to taxpayers. This has manifested itself in the following ways:

- Differentiating service delivery actions/activities across the various segments/groupings of taxpayers, recognizing that taxpayer populations are not homogeneous but are comprised of varying segments/groupings of taxpayers, each with their own characteristics, attitudes, expectations, and behaviors.

- Treating taxpayers as clients or customers with rights that are codified in the form of charters, etc., and publicizing these rights.

- Recognizing that it is often more cost effective to leverage service actions through taxpayers' representatives (e.g. tax professionals, industry/business groups, other third parties).

- Consulting widely with taxpayers and/or their representatives prior to the implementation of changes; designing products more from a 'whole of taxpayer/client' perspective.

- Establishing and monitoring service delivery performance according to prescribed service performance standards.

- Measuring client satisfaction with the level and quality of services offered.

- Demonstrating accountability by publicizing the levels of performance achieved against the service standards set.

A particular feature of efforts to improve the delivery of services to taxpayers over the last 5-10 years has been the use of new technologies. A recent survey of developments in this area has revealed some findings of considerable interest:

- Substantial progress has been made in the use of electronic filing by taxpayers and their agents for *personal income tax administration* purposes; indicative of this progress is the fact that in 2003, the take-up rate for these services exceeded 50 per cent in five OECD member countries, with four achieving 80 per cent or more.

- The Internet has become a significant tool for the delivery of services to taxpayers.

- There has been considerable growth in the provision of electronic payment facilities.

- Call centre phone operations, supported by modern phone technology, are becoming an increasingly significant element of the service delivery strategy.

Resources for tax administrations

Generally speaking, revenue authorities are large consumers of public sector resources and there is, accordingly, considerable interest in ensuring that these resources are used efficiently and effectively. As salary expenditure constitutes the major share of these budgets in all countries, comparisons are frequently made on the staffing levels of the respective bodies. A summary of the staffing levels of national revenue bodies is set out in Table 2.

In the case of the *United States***,** a comparison of relative staffing levels with other OECD countries is significantly complicated by the absence of a national VAT (or a similar tax) administered at the national level, as in all other OECD countries. A further complication is that, unlike most other OECD countries, there are income taxes and retail sales taxes levied at the state level in the United States that are administered separately, not by the national revenue authority.

Table 2: Comparison of Staff-related Measures

COUNTRY	STAFF-RELATED MEASURES			UNUSUAL/ ABNORMAL FACTORS LIKELY/KNOWN TO INFLUENCE REPORTED RATIO
	Aggregate staff usage (FTEs) of national tax body	Citizens/ one full-time staff	Labor force/one full-time staff	
Australia	19 177	1 016	512	
Austria	8 750	929	450	Does not administer collection of social contributions.
Belgium	21 489	476	207	Includes real property, motor vehicle taxes/fees
Canada	38 381	810	425	
Czech Rep.	14 720	700	351	Includes real property, motor vehicle taxes/fees
Denmark[1]	8 226	651	348	Includes real property, motor vehicle taxes/fees
Finland	6 323	820	415	Includes real property, motor vehicle taxes/fees
France[1]	75 046	788	358	Includes real property, motor vehicle taxes/fees
Germany	122 278	665	324	Includes real property, motor vehicle taxes/fees

Greece	14 000	752	311	
Hungary	13 258	768	309	
Iceland	486	586	335	Includes motor vehicle taxes/fees
Ireland	6 364	625	282	Includes customs component
Italy	47 575	1 202	510	
Japan	56 315	2 260	1 199	Most employees are not required to file tax returns; high VAT threshold and low frequency of tax payments; NTA does not administer collection of social contributions.
Korea	16 845	2 804	1 359	Most employees are not required to file tax returns; tax body does not administer collection of social contributions
Luxembourg	628	706	450	
Mexico	28 292	3 536	1 384	Substantial final withholding
Netherlands[1]	25 400	629	320	Includes motor vehicle taxes/fees
New Zealand	4 547	853	425	Includes social welfare-related work
Norway	6 305	716	374	
Poland	51 435	751	339	Includes real property, motor vehicle taxes/fees
Portugal	13 238	778	402	Includes real property, motor vehicle taxes/fees
Slovak Rep.	5 791	929	458	Includes motor vehicle taxes/fees
Spain	23 961	1 680	745	
Sweden	9 030	985	494	Includes real property, motor vehicle taxes/fees
Switzerland	-	-	-	
Turkey	41 880	1 797	541	Includes real property, motor vehicle taxes/fees
United Kingdom —IR/C&E[1]	81 859	730	360	Includes all staff of national contributions agency
United States	100 229	2 261	1 445	No national VAT

1) These countries have all recently announced their intention to make reductions in the staffing of their revenue bodies.

Sources: Country survey responses, annual reports of revenue bodies.

Administrative and Compliance Costs of Taxation

The aggregate costs of operating a tax system are generally regarded as having two components: administrative costs and compliance costs. '*Administrative costs'* relate to public sector costs incurred in administering the tax system and typically include employees' costs (e.g. salaries, retirement contributions/ insurance), accommodation, computing, telephone, postage and other administrative costs. **'***Compliance costs'* relate to the costs incurred by taxpayers, their representatives and other parties (e.g. employers, financial institutions) involved in complying with their legal tax obligations.

The OECD has not carried out any studies in recent times of the compliance costs of member country tax systems. However, there is a body of academic and other research conducted in this area that may be of assistance to the Panel. [8]

National revenue authorities in OECD countries typically receive and account for an annual budget to meet the costs of administering the tax laws. In virtually all OECD countries, data on administrative costs is published annually, to varying levels of detail. It has become a fairly common practice for national revenue authorities to compute and publish (e.g. in their annual reports) a 'cost of collection' ratio as a surrogate measure of the efficiency/effectiveness of administration.[9] The ratio is computed by comparing the annual costs of administration incurred by a revenue authority, with the revenue collected over the course of a fiscal year. It can be expressed as a percentage or as the cost of collecting 100 units of revenue. The ratio is sometimes calculated for a particular tax, but as this tends to raise 'cost apportionment' issues

8 See: "Studying the Studies: An overview of recent research into taxation operating costs" by Chris Evans; eJournal of Tax Research; Vol. 1; No. 1, 2003.

9 Examples include Australia, Ireland, Japan, New Zealand, Singapore, UK and USA.

it is not common practice. A summary of such ratios for a number of OECD countries (drawn from published reports and survey data) is provided in Table 3.

Table 3: Comparison of Administrative Costs to Net Revenue Collections in Selected OECD Countries

COUNTRY	Administrative Costs/ net revenue collections (%)			Factors likely/ known to influence reported ratio
	2000	2001	2002	
Australia	1.11	1.27	1.19	Start up/ implementation costs of GST for 2000/2001.
Austria	0.80	0.71	0.72	High tax burden
Belgium			1.00	
Canada	1.07	1.08	1.20	
Czech Rep.			2.08	Revenue base excludes social contributions
Denmark			0.73	High tax burden.
Finland	0.60	0.61	0.67	High tax burden; revenue base includes social contributions.
France	1.40	1.41	1.44	Revenue base excludes social contributions.
Hungary	1.45	1.23	1.35	
Iceland	-	-	1.12	
Ireland	0.81	0.90	0.95	Includes customs costs & revenues (e.g. VAT on imports); includes social contributions.
Japan /1	1.42	1.54	1.62	Relatively low burden (i.e. less than 30 percent); revenue base excludes separately collected social contributions; substantially reduced administrative workloads due to design features of tax systems.
Korea	0.80	0.85	0.85	Substantially reduced administrative workloads due to design features of tax systems- refer text.
Netherlands	1.70	1.74	1.76	Costs include customs administration; revenue base includes social contributions.
N. Zealand	1.44	1.21	1.17	
Norway	-	0.56	0.59	High tax burden; revenue base includes social contributions.
Poland	0.95	1.06	1.32	(Ratio may be understated due to exclusion of some costs)
Portugal	1.60	1.61	1.68	Revenue base does not include social contributions
Slovak Rep.	1.30	1.43	1.46	Revenue base includes VAT on imports but not social contributions or some income tax refunds
Spain	-	0.81	0.78	
Sweden	0.43	0.44	0.42	High tax burden; revenue base includes social contributions
Turkey	1.94	2.12	0.86	Macro-economic factors (e.g. high inflation)
UK—IRD	1.10	1.11	1.15	Includes all staff of national contributions agency
USA /1	0.43	0.46	0.52	Revenue base includes social contributions.

Sources: Country survey responses, annual reports of revenue bodies.

/1. **Japan**—data as reported in 2002 annual report; **USA**—ratios indicated vary from IRS-published ratios of 0.39 (2000), 0.41 (2001), and 0.45 (2002) owing to use of 'net' and not 'gross' collections.

Most tax authorities tend to publish the ratio for a number of years and, all other things being equal, changes in the ratio over time should reflect movements in relative efficiency and/or effectiveness. This arises from the fact that the ratio is derived from a comparison of inputs (i.e. administrative costs) to outputs (i.e. tax revenue collections); initiatives that reduce relative costs (i.e. improve efficiency) or improve compliance and revenue (i.e. improve effectiveness) will impact on the ratio. In practice, however, there are a number of factors that influence the ratio but which have nothing to do with relative efficiency or effectiveness. Specifically: differences in tax rates and structure; differences in the range and nature of taxes administered by federal revenue authorities; collection of social insurance, retirement contributions, etc.; differences in the range of functions undertaken; and lack of a common measurement methodology.

Clearly, any analysis of differences / movements in the ratio across countries should consider such factors.

4 Concluding comments

Whichever approach to reform is adopted it will not be easy. Some groups of taxpayers will gain, others will lose. There will be transitional issues and considerable attention will need to be paid to the *process* of reform. The experience of OECD countries can assist the United States as it moves forward in its reform of the federal tax system.